

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Vikram Jamalabad et al. Confirmation No.:  
Serial No.: 10/762,449 Examiner: unknown  
Filed: October 24, 2003 Group Art Unit: unknown  
For: PROCEDURES FOR RAPID BUILD AND IMPROVED SURFACE  
CHARACTERISTICS IN LAYERED MANUFACTURE  
Docket No.: 010-99-X05-D2 (1100.1102103)

**TRANSMITTAL SHEET**

Assistant Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

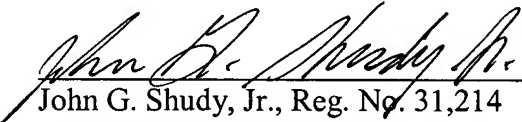
**CERTIFICATE UNDER 37 C.F.R. 1.8:** I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on this 20th day of April, 2004.

By: 

John G. Shudy, Jr.

We are transmitting herewith the attached:

- ☒ Information Disclosure Statement, Form PTO-1449 and 46 cited references.
- ☒ Form PTO 1449 listing references cited in parent application serial no. 09/656,770.
- ☒ Please charge any deficiencies or credit any overpayment in the enclosed fees to Deposit Account No. 50-0413.



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**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Vikram Jamalabad et al.

Confirmation No.:

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Examiner: unknown

Filed: January 20, 2004

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**INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents  
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By:

*John G. Shudy, Jr.*  
John G. Shudy, Jr.

Dear Sirs:

Pursuant to the obligations of candor and good faith imposed by 37 C.F.R 1.56, the documents listed on the attached PTO-1449 are hereby disclosed.

No representation is intended to be made hereby that any of the cited references establishes, by itself or in combination with other information, a prima facie case of unpatentability of any claim of the present case.

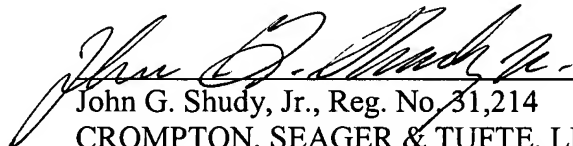
Copies of the documents listed on the 1449 Form were previously either submitted by Applicant and/or cited by the U.S. Patent and Trademark Office in a prior application, U.S. Application No. 09/656,770, filed September 7, 2000, now U.S. Patent No. 6,682,684 or is a U.S. patent application publication or a U.S. patent, upon

which Applicant relies for the benefits provided in 35 U.S.C. §120. Therefore, under the provisions of 37 C.F.R. §1.98(d) and 37 CFR §1.98(a)(2)(i), copies of these documents are not being submitted herewith.

Applicant respectfully requests that the Examiner consider the documents listed on the 1449 Form and indicate that they were considered by making appropriate notations on the attached 1449 form.

Respectfully submitted,

Dated: 4/20/04

  
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**FORM PTO-1449**

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010-99-X05-D2  
(1100.1102103)

Serial No.:  
10/762,449



LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION  
DISCLOSURE STATEMENT

Applicant: Vikram R. Jamalabad et al.

Filing Date  
January 20, 2004

Group Art:  
unknown

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
	4,408,754	10/11/1983	Meier			
	5,059,266	10/22/1991	Yamane et al.			
	5,121,329	06/09/1992	Crump			
	5,140,937	08/25/1992	Yamane et al.			
	5,189,781	03/02/1993	Weiss et al.			
	5,209,878	05/11/1993	Freed et al.			
	5,216,616	06/01/1993	Masters			
	5,263,130	11/16/1993	Pomerantz et al.			
	5,287,435	11/15/1994	Cohen et al.			
	5,303,141	04/12/1994	Batchelder et al.			
	5,340,433	08/23/1994	Crump			
	5,398,193	03/14/1995	deAngelis			
	5,402,351	03/28/1995	Batchelder et al.			
	5,460,758	10/24/1995	Langer et al.			
	5,503,785	04/02/1996	Crump et al.			
	5,506,607	04/09/1996	Sanders, Jr. et al.			
	5,535,128	07/09/1996	Laube et al.			
	5,554,336	09/10/1996	Hull			
	5,572,431	11/05/1996	Brown et al.			
	5,594,652	01/14/1997	Penn et al.			
	5,595,703	01/21/1997	Vancreen et al.			
	5,596,504	01/21/1997	Tata et al.			
	5,622,216	04/22/1997	Brown			
	5,633,021	05/27/1997	Brown et al.			
	5,649,277	07/15/1997	Greul et al.			
	5,676,904	10/14/1997	Almquist et al.			
	5,694,324	12/02/1997	Masters et al.			

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	Applicant: Vikram R. Jamalabad et al.		
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	Filing Date January 20, 2004		Group Art: unknown

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
	5,738,817	04/14/1998	Danforth et al.			
	5,740,051	04/14/1998	Sanders, Jr. et al.			
	5,859,775	01/12/1999	Barlage, III et al.			
	5,866,058	02/02/1999	Batchelder et al.			
	5,900,207	05/04/1999	Danforth et al.			
	5,906,863	05/25/1999	Lombardi et al.			
	5,968,561	10/19/1999	Batchelder et al.			
	5,969,971	10/19/1999	Brown et al.			
	6,027,326	02/22/2000	Cesarano, III et al.			

#### FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No

#### OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	Wayne Tiller et al., "Offsets of Two-Dimensional Profiles", IEEE Computer Graphics and Applications, vol. 4, no. 9, September 1984, pp.36-46.
	Martin Held, "A geometry-based investigation of the tool path generation for zigzag pocket machining", The Visual Computer, International Journal of Computer Graphics, vol. 7, nos.5-6, 1991, pp. 296-308.
	Saif E.O. Saeed et al., "An Efficient 2D Solid Offsetting Algorithm", Geometric Modeling Project, Department of Mechanical Engineering, The University of Leeds, Leeds, LS2 9JT, England, dated prior to September 7, 2000.
	R. van Weeren et al., "Quality of Parts Processed by Fused Deposition", Solid Freeform Fabrication Proceedings, September 1995, pp. 314-25.
	Vikram J. Jamalabad et al., "Topology Driven Improvement of FDC Build Parameters", Solid Freeform Fabrication Symposium 1998, proceedings August 10-12, 1998, The University of Texas at Austin, pp. 319-26.
	Mark A. Hall et al., "Feature Abstraction in Knowledge-Based Critique of Designs", Issues in Design/Manufacture Integration-1990, DE-vol. 29, The American Society of mechanical Engineers, 1990, pp. 43-9.
	Bertoldi M., Yardimici M.A. et al., "Domain Decomposition and Space Filling Curves in Tool path Planning and Generation", Solid Freeform Fabrication Proceedings, August 1998, pp. 267-74.

<b>FORM PTO-1449</b> Page 3 of 3	Atty. Docket No.: 010-99-X05-D2 (1100.1102103)	Serial No.: 10/762,449
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	Vikram R. Jamalabad et al., "Process Improvements in Fused Deposition of Ceramics (FDC): Progress Towards Structurally Sound Components", Extended Abstract 96-DETC-DFM-1279, 1 page, dated prior to September 7, 2000.
	D.T. Lee, "Medial Axis Transformation of a Planar Shape", III Transactions on Pattern Analysis and Machine Intelligence, vol. PAMI-4, no. 4, July 1982, pp. 363-9.
	Stratasys, Inc., "QuickSlice Manual", June 17, 1996, pp. Q1-Q20 and Q71-Q76.

EXAMINER:	DATE CONSIDERED:
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.